

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Antimicrobial Division

April 12, 2016

**DP BARCODE:** 431525

**MRID:** 496445-01,-02, 496420-01, 432329-01

**SUBJECT:** CLB

**REG. NO. OR FILE SYMBOL:** 5813-RRR

**DOCUMENT TYPE:** Product Chemistry Review

**Manufacturing-use [ ]** OR **End-use Product [X]**

**INGREDIENTS:**

<u>PC Code(s)</u>	<u>CAS Number(s)</u>	<u>Active Ingredient(s)</u>
014701	7681-52-9	Sodium Hypochlorite

**TEST LAB:** N/A

**SUBMITTER:** The Clorox Company

**GUIDELINE(S):** 830.1550 - 830.1800; 830.6302 – 830.7950

**COMMODITIES:** Formulation

**REVIEWER:** Boris S. Yurchak

**ORGANIZATION:** AD/PSB/CTT

**APPROVER:** Karen P. Hicks

**APPROVED DATE:** 5 / 3 /2016

**COMMENT:** This product is for non-food use

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Antimicrobial Division

April 12, 2016

**MEMORANDUM**

**SUBJECT:** Product Chemistry Review for EPA Reg. No. 5813-RRR  
Product Name: CLB  
DP Barcode: 431525

**TO:** Demson Fuller / Srinivas Gowda  
PM Team # 32

**FROM:** Boris S. Yurchak, Chemist  
Product Science Branch, CT Team  
Antimicrobials Division (7510P)

**THRU:** Karen P. Hicks, CT Team Leader  
Product Science Branch  
Antimicrobials Division (7510P)

**APPLICANT:** The Clorox Company  
**Action code:** (A540) New product  
**Due out date:** May 7, 2016

Two handwritten signatures in black ink. The top signature appears to be "Boris S. Yurchak" and the bottom signature appears to be "Karen P. Hicks".

**PRODUCT FORMULATION FROM LABEL:**

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
Sodium hypochlorite	6.0
<u>Other Ingredient(s)</u>	<u>94.0</u>
TOTAL	100.0

## BACKGROUND:

The Clorox Company provided EPA Form 8570-4 (Confidential Statement of Formula), one basic and one alternate formulation (A01), both dated 12/15/2015; MRID Nos. 496445-01,-02, 496420-01 and 432329-01; a label, dated 12/15/2015; and EPA Form 8570-35 (Data Matrix), dated 12/15/2015. The registrant is requesting product chemistry review of the subject product.

### The data package also included:

1. Cover letter from the Registrant to EPA, dated 12/15/2015.
2. EPA Application Form 8570-1, dated 12/15/2015.
3. Certification with Respect to Citation of Data Form 8570-34, dated 12/15/2015.
4. Transmittal Document, dated 12/15/2015.
5. Formulator's Exemption Statement Form 8570-27, dated 12/15/2015.
6. E-mail from the Registrant, dated 02/22/2016.

## FINDINGS:

1. EPA Reg. No. **5813-RRR** is an end-use product containing the active ingredient Sodium Hypochlorite, with a label claim nominal concentration of 6.0%, and other ingredients content of 94.0%. The product is for sanitizing and disinfection of surfaces and killing of germs. The product is produced by a non-integrated system.
2. The each of two submitted CSFs contains [REDACTED] additional formulas with variable source concentration of the active ingredient based on [REDACTED] registered source products. The data are listed in tabular manner that was previously approved. The nominal concentration of the active ingredient agrees with that on the label, meeting PR Notice 91-2 (including tabulated sources as well). All ingredients are cleared for use in pesticide formulations. The proposed certified limits for all ingredients are wider than the standard ones and justified in MRID 496445-01. The requirements of 40 CFR §158.350(2)(c) are satisfied. The CSFs are acceptable.
3. Data reported in MRID Nos. 496445-01,-02, 496420-01 and 432329-01 satisfy the product chemistry data requirements under Subgroups A and B, which pertain to Product Identity and Composition, and Physical and Chemical Properties, respectively. Additionally, the Clorox Company refers to the product Puma (EPA Reg. No. 5813-100), which is essentially similar to the subject product.
4. The Ingredients Statement on the draft label is acceptable as per 40 CFR §156.10(g) and PR Notices 91-2, 97-5, and 97-6. The Storage and Disposal Statements are acceptable in accordance with 40 CFR §156.10(i)(2)(ix) and PR Notice 83-3.

**\*Product ingredient source information may  
be entitled to confidential treatment\***

**CONCLUSION:**

The registrant has satisfied the product chemistry requirements for the registration of EPA Reg. No. **5813-RRR**.

**Product Chemistry Data****Subgroup A: Series 830.1550 - 830.1800 (40 CFR 158.155 - 158.180)**

<b>GUIDELINE REFERENCE NO. (GRN)/ TITLE 830</b>	<b>40 CFR §</b>	<b>MRID Number</b>	<b>Data Fulfilled</b>
.1550 Product Identity and Composition	158.320	CSFs, 49644501	Y
.1600 Description of Materials Used to Produce the Product	158.325	49644501	Y
.1620 Description of Production Process	158.330		N/A
.1650 Discussion of Formulation Process	158.165	49644501	Y
.1670 Discussion of Formation of Impurities	158.167	49644501	Y
.1700 Preliminary Analysis	158.345		N/A
.1750 Certified Limits	158.350	49644501	Y
.1800 Enforcement Analytical Method	158.355	49642001	Y

**Subgroup B: Series 830.6302 - 7950 (40 CFR 158.190)**

<b>Guideline Reference No. (GRN) / Title 830</b>	<b>Value or Qualitative Description</b>	<b>MRID Number</b>	<b>Data Fulfilled</b>
.6302 Color	Clear, yellow	496445-01	Y
.6303 Physical State	Clear liquid	496445-01	Y
.6304 Odor	Characteristic bleach odor	496445-01	Y
.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions	Not applicable. The product is not TGAI/MP.		N/A
.6314 Oxidation/Reduction Chemical Incompatibility	The standard oxidation potential of hypochlorite is +0.90 volts. (i.e., it is reductant)	432329-01	Y
.6315 Flammability/ Flame Extension	The product does not contain flammable liquid. >93°C	496445-02 CSFs	N/A
.6316 Explodability	The product is not potentially explosive.	496445-02	N/A
.6317 Storage Stability	The study is in progress yet.	496445-02	I
.6319 Miscibility	The product is not to be mixed with petroleum distillate.	496445-02	N/A
.6320 Corrosion Characteristics	The study is in progress yet.	496445-02	I
.6321 Dielectric Breakdown Voltage	The product is not intended to be used around electrical equipment.	496445-02	N/A
.7000 pH	11.92 @ 25°C	496445-01	Y
.7050 UV/Visible Light Absorption	Not applicable. The product is not TGAI/MP.		N/A
.7100 Viscosity	1.34 cP @ 20°C and 0.92 cP @ 40°C	496445-01	Y
.7200 Melting Point	Not applicable. The product is not TGAI/MP.		N/A
.7220 Boiling Point	Not applicable. The product is not TGAI/MP.		N/A
.7300 Density/Bulk Density	1.0714 g/mL @ 21.7°C	496445-01	Y
.7370 Dissociation Constant in Water	Not applicable. The product is not TGAI/MP.		N/A
.7550 Octanol/Water Partition Coefficient	Not applicable. The product is not TGAI/MP.		N/A
.7840 Solubility to Water and Organic Solvents	Not applicable. The product is not TGAI/MP.		N/A
.7950 Vapor Pressure	Not applicable. The product is not TGAI/MP.		N/A

Explanations: Y = Requirement fulfilled; N = Requirement not fulfilled; N/A = Not applicable; G = Data gap; U = Upgradeable; I = Incomplete or in progress; W = Waived

**Note to PM:**

Storage Stability (830.6317) and Corrosion Characteristics (830.6320) studies are in progress.